

Embedded Linux build system

Simple Fast Efficient

<http://buildroot.org/>

Open source components

In-house components

System configuration

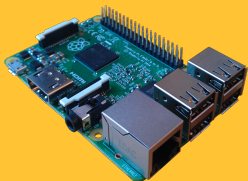
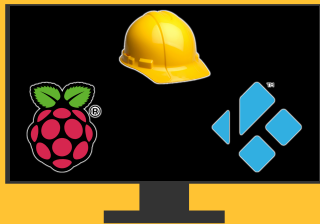
BuildRoot
Making Embedded Linux Easy

rootfs image

kernel image

bootloader image

Demo - Buildroot 2015.02*



Mediacenter Raspberry Pi 2 Kodi 14.1

UPnP/DLNA, Avahi,
Shairplay, Samba3...

Build time**: 47'40"

FS Size: 241MiB

Boot time***: <15"



NAS Openblocks AX3 minidlna

Avahi, ffmpeg...

Build time**: 9'57"

FS Size: 19MiB

Boot time***: 11"

Demo source code: http://elinux.org/Buildroot:TechShowcase2015_Demo

* with updated rpi-firmware
** 8x Xeon E3-1245 @ 3.4GHz
*** without optimisation

What's new in Buildroot?

git log 2013.02..2015.02

Ever growing community

8925 commits from 292 contributors

Infrastructure improvements

detect broken packages that use host headers,
allow defconfigs and recipes from external tree,
check integrity of downloaded archives,
better report licensing information...

New architectures

Arc, Blackfin, NIOS-II

New package infrastructures

kconfig, luarocks, perl, python, rebar, virtual

+600 packages (1500+):

grub2, ejabberd, aircrack-ng, Qt 5.4, samba4, bluez5, Kodi, wireshark, mono, nftables, wayland, weston, ca-certificates, vlc, tzdata, lxc, gnupg2, minidlna, GTK-3, postgresql, SELinux libs, nodejs, libglew, Google-breakpad, jquery, gnu-efi, libbluray, linux-zigbee, mesa3d-demos, libva, ipmitool, clamav, bdwgc, dtc, mmc-utils, free-radius, nmap, libglu, btrfs-progs, glmark2, cppunit, exim, gstreamer-1.x, libdvbcsa, nginx, gtest, bootstrap, dovecot, mongoose, bcache-tools, crypto-dev, libcdio, nut, alcu, swig, znc, tinysalsa, rtmpdump, knock, libqrencode, libvbsi, dilo, dvdauthor, exfat-utils, jlmct, libcec, clpack, webp, ustr, slmicsfs, omniorb, ola, libvpx, benejson, crda, dv-scantables, exiv2, flickrapi, libas, paper, iperf3, l4, mp4v2, zyre, w_scan, tclap, sshpass, mjpegtools, enscript, fatfs, espeak, uci, intel-microcode, ffp, git, ascp, dtdo, libci, haveged, moolib, linkin, gale, pfmids, ocrad, rapidjson...